- 39. The method of claim 35, wherein the cancer-directed therapy is monoclonal antibody therapy or tyrosine kinase inhibitor therapy.
- 40. A method for monitoring response to an anticancer therapy, comprising the step of
  performing the method of claim 1 on blood plasma or serum from an animal or human
  with cancer to whom anticancer therapy is administered, and wherein response to the
  anticancer therapy is accomplished by qualitative or quantitative detection of epidermal
  growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc
  RNA, heterogeneous nuclear ribonucleoprotein A2/B1 RNA or any combination thereof.
  - A method for monitoring response to an anticancer therapy, comprising the step of performing the method of claim 2 on a bodily fluid from an animal or human with cancer to whom anticancer therapy is administered, and wherein response to the anticancer therapy is accomplished by qualitative or quantitative detection of epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, heterogeneous nuclear ribonucleoprotein A2/B1 RNA or any combination thereof.
  - 42. A diagnostic kit comprising primers specific for amplifying epidermal growth factor RNA or cDNA prepared therefrom and reagents for extracting RNA from plasma or serum according to the method of claim 1.

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- A diagnostic kit comprising primers specific for amplifying epidermal growth factor receptor RNA or cDNA prepared therefrom and reagents for extracting RNA from plasma or serum according to the method of claim 1.
- A diagnostic kit comprising primers specific for amplifying her-2/neu RNA or cDNA prepared therefrom and reagents for extracting RNA from plasma or serum according to the method of claim 1.
  - A diagnostic kit comprising primers specific for amplifying c-myc RNA or cDNA prepared therefrom and reagents for extracting RNA from plasma or serum according to the method of claim 1.
  - 46. A diagnostic kit comprising primers specific for amplifying heterogeneous nuclear ribonucleoprotein A2/B1 RNA or cDNA prepared therefrom and reagents for extracting RNA from plasma or serum according to the method of claim 1.
  - 47. A diagnostic kit comprising primers specific for amplifying epidermal growth factor RNA or cDNA prepared therefrom and reagents for extracting RNA from a bodily fluid according to the method of claim 2.
  - 48. A diagnostic kit comprising primers specific for amplifying epidermal growth factor receptor RNA or cDNA prepared therefrom and reagents for extracting RNA from a bodily fluid according to the method of claim 2.

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- 49. A diagnostic kit comprising primers specific for amplifying her-2/neu RNA or cDNA prepared therefrom and reagents for extracting RNA from a bodily fluid according to the method of claim 2.
- A diagnostic kit comprising primers specific for amplifying c-myc RNA or cDNA prepared therefrom and reagents for extracting RNA from a bodily fluid according to the method of claim 2.
- A diagnostic kit comprising primers specific for amplifying heterogeneous nuclear ribonucleoprotein A2/B1 RNA or cDNA prepared therefrom and reagents for extracting RNA from a bodily fluid according to the method of claim 2.
- 52. A method for producing cDNA by reverse transcription of a fraction of extracellular mammalian RNA extracted from plasma or serum, wherein the fraction comprises epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, heterogeneous nuclear ribonucleoprotein A2/B1 RNA, or any combination thereof, whereby cDNA corresponding to said RNA is produced.
- 20 53. A method for producing cDNA by reverse transcription of a fraction of extracellular mammalian RNA extracted from a bodily fluid, wherein the fraction comprising epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA,